

Unit 12

Day 1

Relations and Functions

Section 3.1 of textbook

Relation- is a set of ordered pairs

Domain- is the set of all x-values of a relation

Range- is the set of all y-values of a relation

1) List the ordered pairs of this relation. State the domain and range.

$$m = \{(1, 3), (2, 5), (-2, -1), (0, -1), (2, 3), (4, 6)\}$$

$$(1, 3), (2, 5), (-2, -1), (0, -1), (2, 3), (4, 6)$$

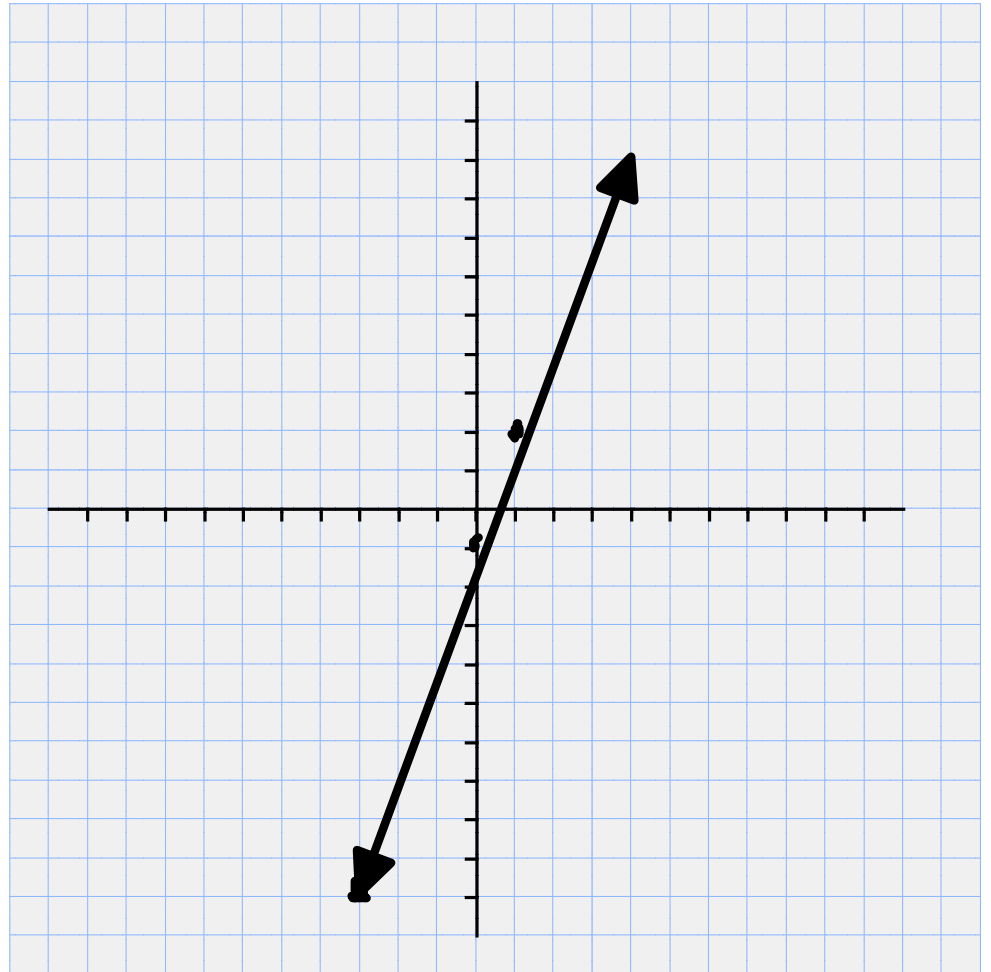
$$D = \{1, 2, -2, 0, 2, 4\}$$

$$R = \{3, 5, -1, -1, 3, 6\}$$

2)

$$y = 3x - 1$$

x	y
-3	-10
0	-1
1	2

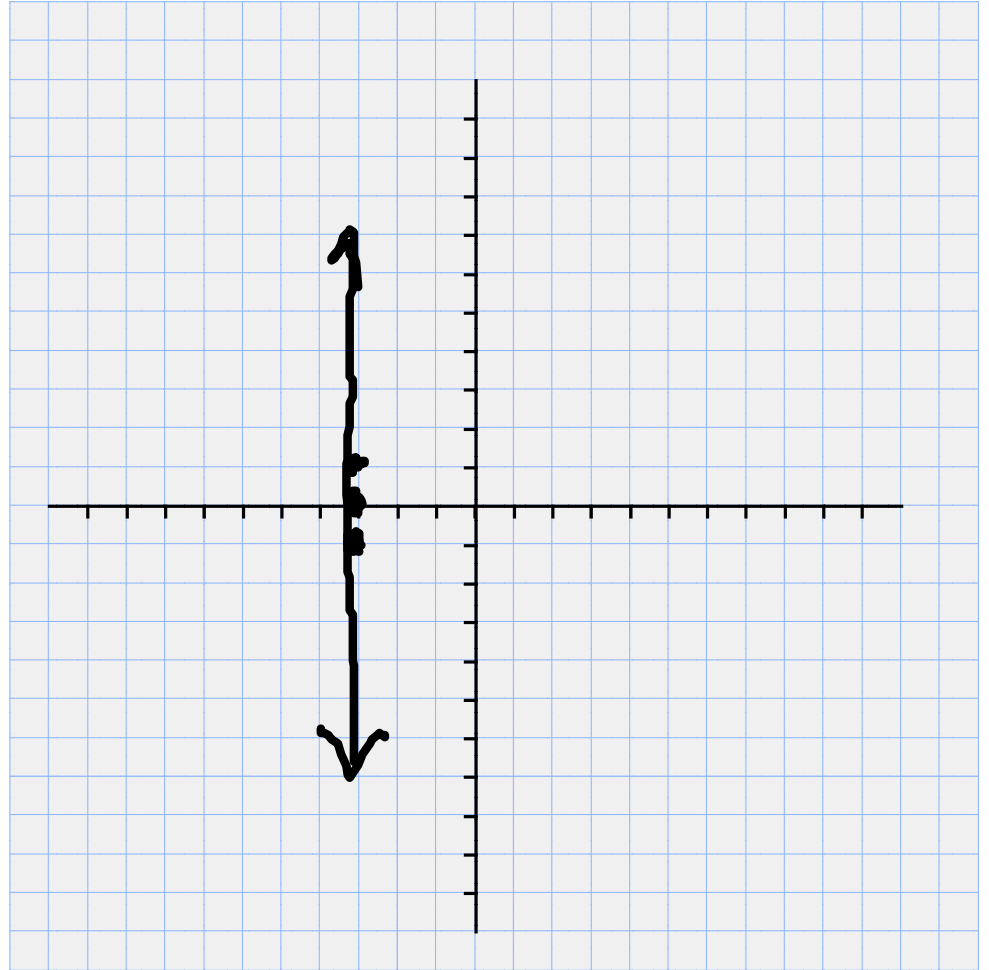


3)

$$x = -3$$

x	y
-3	-1
-3	0
-3	1

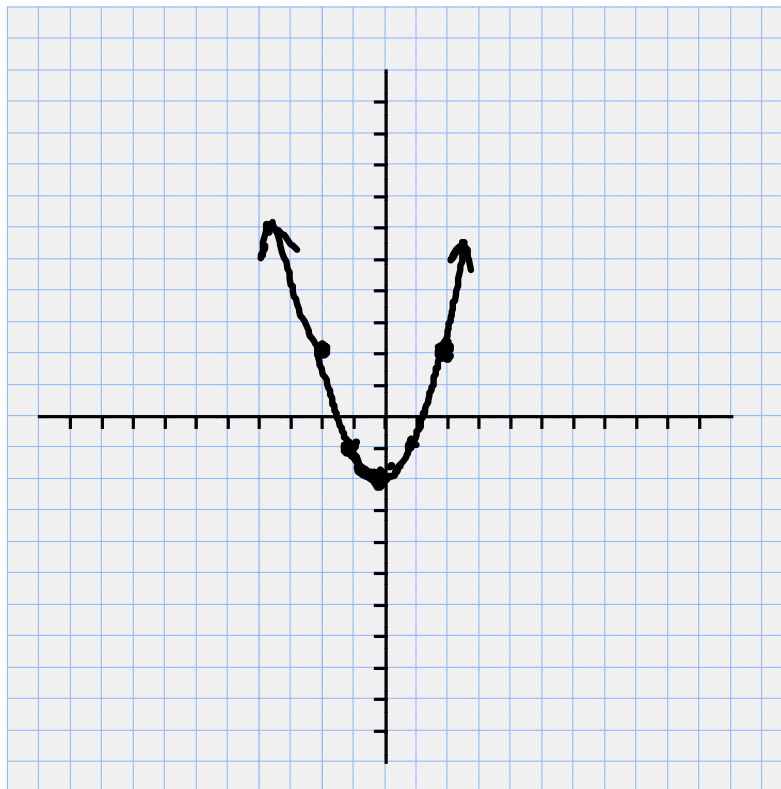
$(-3, -1)$
 $(-3, 0)$
 $(-3, 1)$



4)

$$y = x^2 - 2$$

x	y
2	2
0	-2
2	2
-1	-1
-1	-1

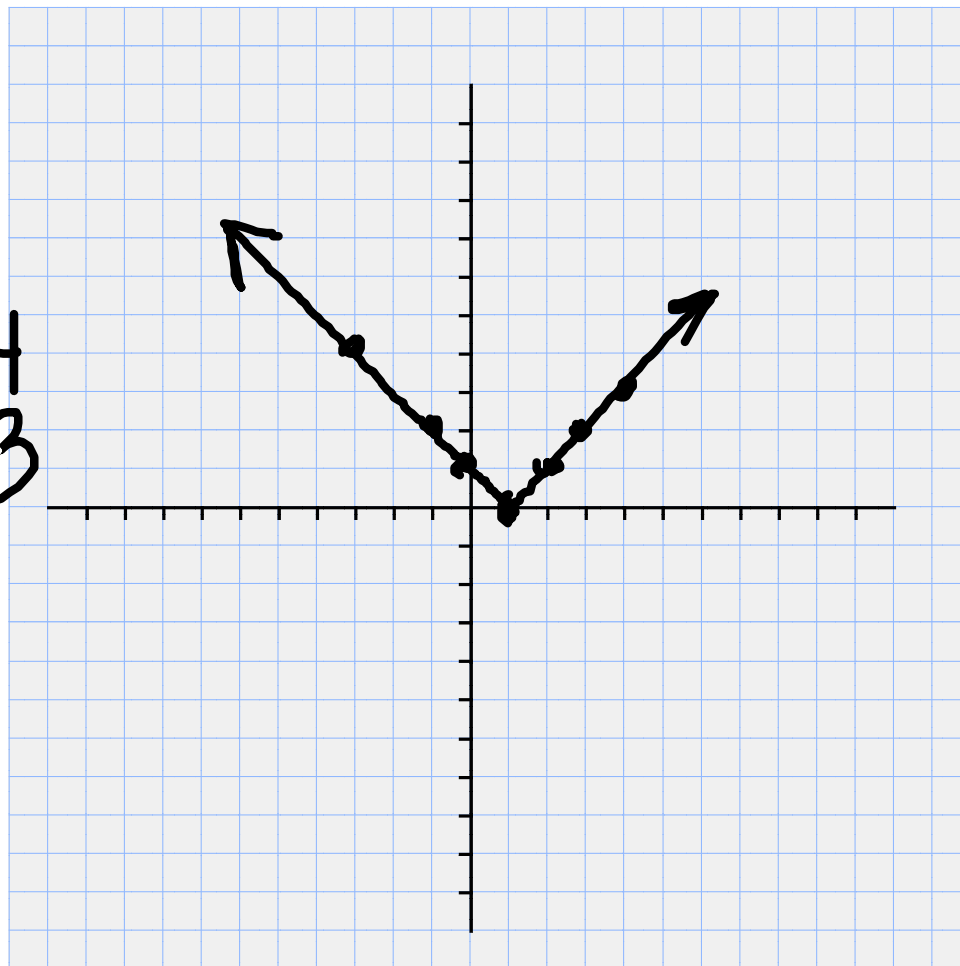


5)

$$y = |x - 1|$$

x	-3	-1	0	1	2	3	4
y	4	2	1	0	1	2	3

$$y = -|x - 1|$$

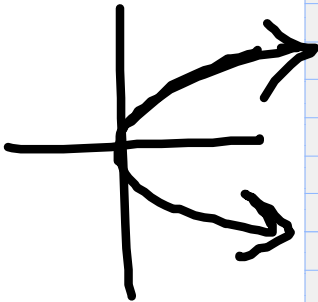


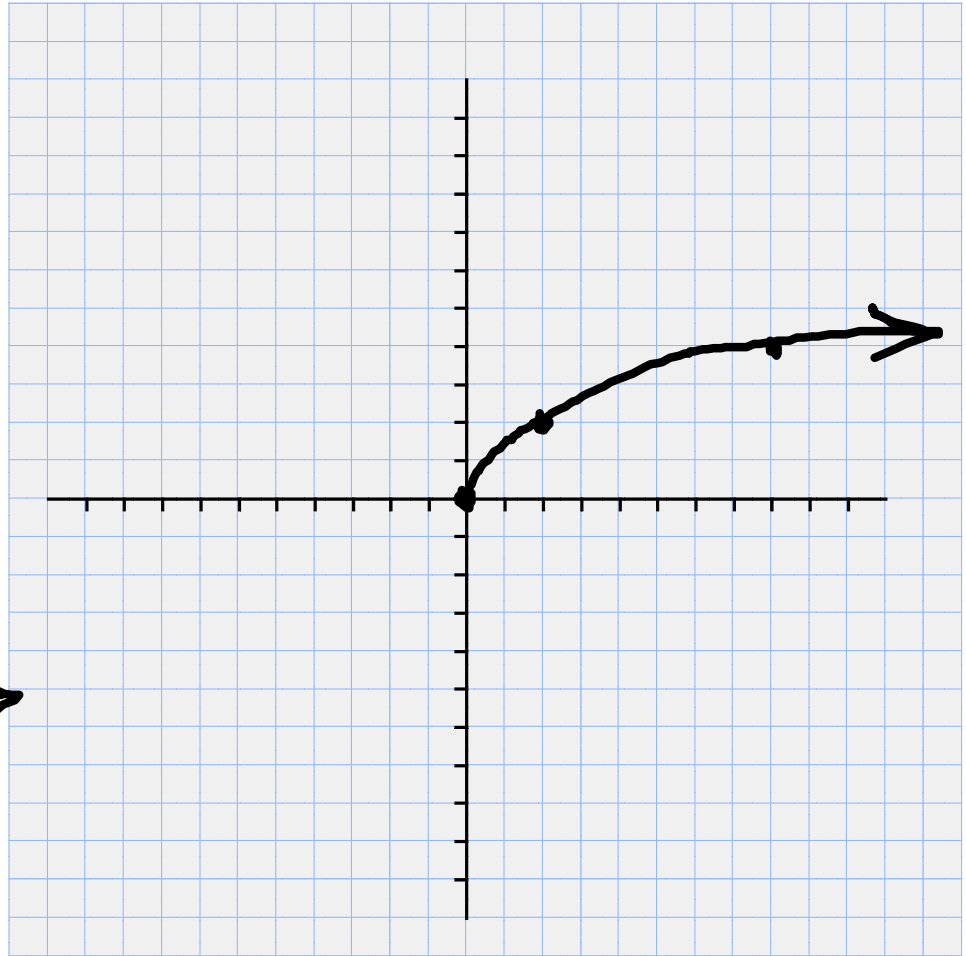
6)

$$y = \sqrt{2x}$$

x	2	-2	8	0	-1
y	2	0	4	0	0

$$y = -\sqrt{2x}$$

$$y^2 = x$$


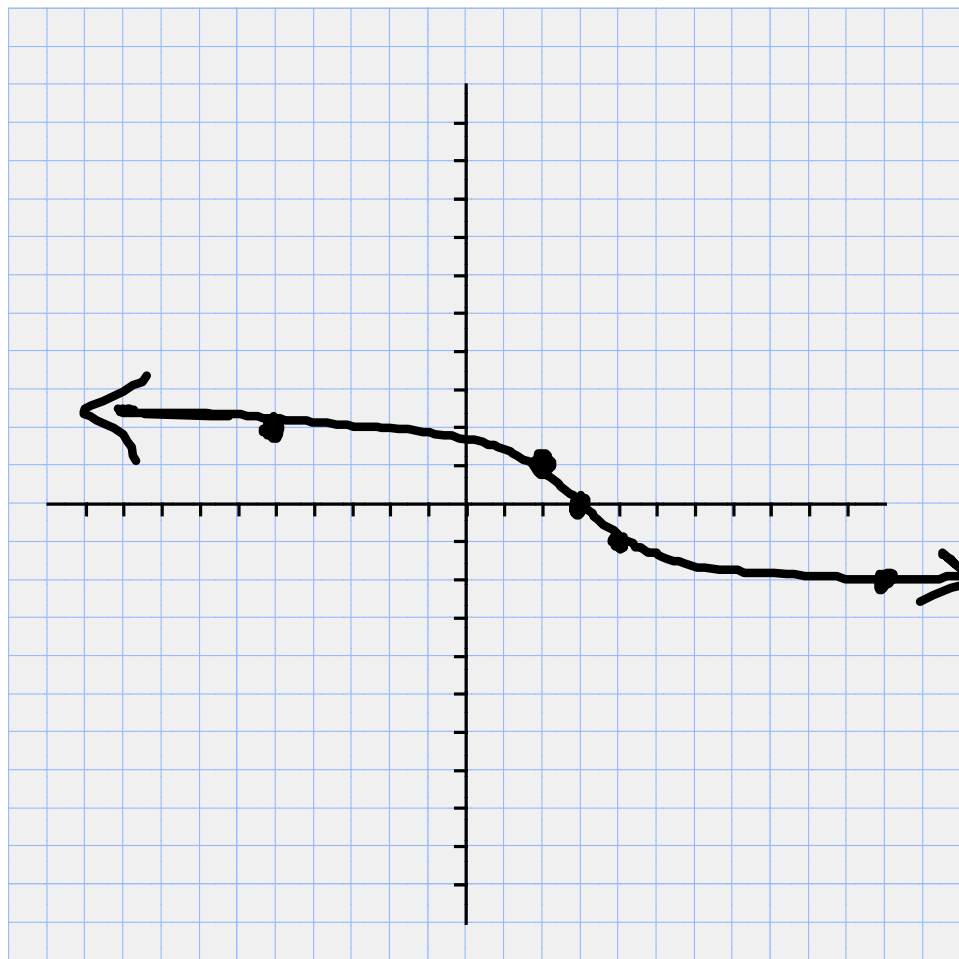


7)

$$y = \sqrt[3]{-x+3}$$

x	y
3	0
5	2
2	1
1	-2
4	-1

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Complete *Guess my situation* worksheet as a class.

HOMEWORK:

p 175: 5-12 (all) plus worksheets